

EXHIBIT 2

LEXSEE 1995 U.S. DIST. LEXIS 18314



Caution

As of: Dec 27, 2007

EDWARD MOLL V. NORTHERN TELECOM, INC., et al.

CIVIL ACTION NO. 94-5451

**UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF
PENNSYLVANIA**

1995 U.S. Dist. LEXIS 18314; 37 U.S.P.Q.2D (BNA) 1839

December 8, 1995, Decided

December 11, 1995, FILED

CASE SUMMARY:

PROCEDURAL POSTURE: Defendant moved for partial summary judgment of claim interpretation in plaintiff's action for patent infringement.

OVERVIEW: Plaintiff brought an action for patent infringement of an invention related to a system for storing and/or transmitting voice signals without also transmitting pauses or periods of silence, whose purpose was to increase efficiency by reducing the amount of bandwidth needed for transmission of conversations. Defendant brought a motion for partial summary judgment of claim interpretation in the form of six specific and two more general findings interpreting two of the patent's claims. The court held that it had the power and obligation to construe as a matter of law the meaning of language used in the patent claim. In doing so, the court granted the motion as to six of eight requests for claim interpretation.

OUTCOME: The court granted the motion as to six of eight requests for claim interpretation, since claim construction was a matter of law for the court rather than a factual question for the jury.

LexisNexis(R) Headnotes

Governments > Courts > General Overview
Patent Law > Infringement Actions > Claim Interpretation > Fact & Law Issues

Patent Law > Infringement Actions > Claim Interpretation > Scope

[HN1] Claim construction is always a matter of law for the court, rather than a factual question for the jury. In a case tried to a jury, the court has the power and the obligation to construe as a matter of law the meaning of language used in the patent claim. Thus, resolving a patent infringement action requires two steps: (1) a court must first, as a matter of law, interpret all the claims in the patent that are in dispute, and (2) once the court interprets the claims, the finder of fact must then scrutinize the accused device in order to determine whether the accused device infringes the patent-in-suit.

Civil Procedure > Trials > Bench Trials

Civil Procedure > Trials > Jury Trials > Jury Instructions > General Overview

Patent Law > Infringement Actions > Claim Interpretation > General Overview

[HN2] A district court has three possible procedural postures for interpreting claims: (1) interpret the claims on the paper record, if possible; (2) hold a separate bench trial to resolve the disputes surrounding claim interpretation before trial; or (3) wait until the actual trial and rule on the claim interpretation issues just prior to instructing the jury.

Patent Law > Claims & Specifications > Description Requirement > General Overview
Patent Law > U.S. Patent & Trademark Office Proceedings > Filing Requirements > Drawings

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Patent Law > U.S. Patent & Trademark Office Proceedings > Reissues > General Overview

[HN3] A court must follow several guidelines for proper claim construction. Claims are the numbered paragraphs appearing at the end of the patent specification which contain words used by the inventor to describe his or her invention. A fortiori, the claims of a patent define the scope of the invention and it is to these wordings that one must look to determine if there has been infringement. Courts can neither broaden nor narrow the claims to give the patentee something different from what he or she had set forth. However, while courts are confined by the language of the claims, they are not confined to the language of the claims in interpreting their meaning. Rather, proper claim interpretation requires consideration of additional sources: the patent's specification, the drawings, and the patent's prosecution history in the Patent and Trademark Office.

Patent Law > Infringement Actions > Claim Interpretation > General Overview***Patent Law > U.S. Patent & Trademark Office Proceedings > Filing Requirements > Drawings***

[HN4] The specification of a patent is a written description of the invention, sometimes supplemented by figures or drawings. 35 U.S.C.S. § 112 (first paragraph). While a specification may not be used to alter the explicit language of a claim, the specification may act as a dictionary in explaining the invention and interpreting the claims. Moreover, while a patentee is free to be his or her own lexicographer, any special definition of a word used in a claim must be clearly defined in the specification. Without a special definition, a word will be given its ordinary and accustomed meaning.

Patent Law > Infringement Actions > Claim Interpretation > General Overview***Patent Law > Infringement Actions > Prosecution History Estoppel > General Overview***

[HN5] A court must also consider the patent's prosecution history, or "file wrapper," if it is in evidence. However, although the prosecution history can and should be used to understand the language used in those claims, it, similar to the specification, cannot enlarge, diminish, or vary the limitations in the claims.

Criminal Law & Procedure > Trials > Judicial Discretion***Evidence > Testimony > Experts > Helpfulness******Patent Law > Infringement Actions > Claim Interpretation > General Overview***

[HN6] A court may, in its discretion, receive extrinsic evidence in order to assist the court in understanding scientific principles, the meaning of technical terms, and terms of art that appear in the patent and prosecution history. However, the decision to utilize extrinsic evidence rests solely with the trial judge. Furthermore, the extrinsic evidence is to be used only for the purpose of assisting the court in understanding the patent, and not for the purpose of varying or contradicting the terms of the claim. An opinion of an expert witness is an example of the extrinsic evidence a court may rely upon in interpreting claims.

Patent Law > Infringement Actions > Claim Interpretation > General Overview

[HN7] As to expert legal opinions, the court has complete discretion to adopt the expert legal opinion as its own, to find guidance from it, or to ignore it entirely, or even to exclude it. When legal "experts" offer their conflicting views of how the patent should be construed, or where the legal expert's view of how the patent should be construed conflicts with the patent document itself, such conflict does not create a question of fact nor can the expert opinion bind the court or relieve the court of its obligation to construe the claims according to the tenor of the patent. Moreover, an inventor's testimony is entitled to "no deference." The court's "complete discretion" is applicable even when the "legal expert" is the inventor himself or herself.

Patent Law > Infringement Actions > Claim Interpretation > General Overview

[HN8] A court may utilize an inventor's deposition testimony in determining the meaning of patent claims.

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JUDGES: JUDGE CLARENCE C. NEWCOMER

OPINION BY: CLARENCE C. NEWCOMER

OPINION

MEMORANDUM

Presently before the Court is defendant Northern Telecom's Motion for Partial Summary Judgment of Claim Interpretation, plaintiff Moll's Opposition thereto, and defendant's Reply thereto. For the reasons that follow, this Court will grant defendant's Motion in part and deny the Motion in part at this time. As specified in more detail *infra*, the remaining issues will be resolved following a brief *Markman* bench trial on December 18, 1995.

I. Background

A. Procedural History of this Action

This is an action for patent infringement. Plaintiff-inventor Edward Moll is the owner [*2] of *United States Patent No. 4,280,192* ("the '192 patent"). Moll filed a complaint in this Court seeking a jury trial and alleging that defendant Northern Telecom has infringed and continues to infringe Moll's '192 patent.¹ The parties have completed discovery, and Northern Telecom recently filed three motions for summary judgment. The first motion, which is the subject of this opinion, seeks a partial summary judgment of claim interpretation. The second motion seeks a summary judgment of noninfringement, and the third motion seeks a summary judgment that the '192 patent is invalid. Moll subsequently filed his responses to those motions, and Northern Telecom filed reply briefs to all three motions.

1 Moll also originally named as defendants Bell Atlantic Corporation and Bell Atlantic Mobile Systems, Inc. By stipulation of the parties, this Court subsequently dismissed the complaint against both Bell Atlantic defendants.

B. The Technology at Issue²

2 The following descriptions were provided to the Court by Northern Telecom. As Moll does not dispute the descriptions in his opposition brief, this Court assumes that Moll adopts Northern Telecom's descriptions, unless otherwise noted.

[*3] Moll's '192 patent, entitled "Minimum Space Digital Storage of Analog Information," relates to a system for storing and/or transmitting voice signals without also transmitting pauses or periods of silence.³ The purpose of deleting the pauses is to increase efficiency by reducing the amount of bandwidth needed for transmission of conversations. Because two types of technology affect the parties' dispute, a brief explanation of those technologies is necessary.

3 The parties dispute whether the '192 patent is limited to storage systems or whether it also covers transmission systems.

1. Real-time Transmission Systems and Storage Systems

Two different types of communication systems, "real time transmission systems" and "storage systems," are implicated by this litigation. A "real-time transmission system," such as the public telephone system, attempts to preserve the characteristics of interactive conversations by sending data from a transmitter to a receiver with a minimum of delay. For instance, [*4] because excessive delay impedes interactive conversation, the CCITT (the international standards-setting body for telecommunications) limits one-way delays for interactive conversations to less than 450 milliseconds. An example of a problem created by such excessive delay is two people speaking simultaneously when each believes the other is silent.

A "storage system," on the other hand, does not involve interactive communication. For example, voice mail devices are storage systems because the system stores the data without immediately transmitting it. While the stored data may be transmitted, such as when accessing voice mail remotely, that transmission is not in real time. Another example of non-realtime transmission of data occurs in military settings where one speaker must affirmatively acknowledge the end of a transmission, such as by saying the word "over." Non-real-time transmission systems can tolerate delays that are unacceptable for real-time transmissions because non-real-time transmission systems do not attempt to preserve the characteristics of interactive conversations.

2. Analog Signals and Digital Signals

An analog signal is a "signal, the significant property [*5] of which can have any value. The significant property may be the amplitude, phase or frequency of an electrical signal, the angular position of a shaft or other pressure of a fluid." S.W. Amos, *Dictionary of Electronics* at 8 (1981). Thus, analog signals, such as those representing temperature or amplitude, can assume any value within a given range. Signals are often termed analog where it is necessary to contrast them with digital signals. An audio signal is an example of an analog signal. *Id.*

On the other hand, a digital signal is "a signal of which the significant property can have only a limited number of discrete values. The term is widely used in binary transmission where there are only two discrete values." *Id.* at 83. A digital signal is one that shows data

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or physical quantities by digits. The Digital Dictionary 123 (2d Ed. 1984). For example, a digital representation of temperature would be a series of measured temperature values.

A circuit element known as an analog-to-digital (A/D) converter converts analog signals to digital signals for processing and data transmission. *Id.*

C. Moll's '192 Patent: Description of Circuitry

Figure 1 of the '192 patent, [*6] seen below, illustrates the relevant portion of the preferred embodiment of the system claimed in the '192 patent.

[SEE U.S. PATENT IN ORIGINAL]

The audio analog signal, referred to as audio signal 10, is seen on the right hand side of Figure 1. Analog audio signal 10 simultaneously travels to several parts of the circuit. The A/D converter 12 converts audio signal 10 into a digital representation for eventual placement in register 14. '192 Patent, Column 2, lines 36-50. The voice-activated switch, VOX 22, compares the amplitude of analog signal 10 to a predetermined threshold in order to detect the beginning of a pause in the audio signal. '192 Patent, Column 3, lines 22-30. When the amplitude of audio signal 10 falls below that threshold, indicating a pause, VOX 22 sends a coded signal pertaining to the start, duration and end of the pause, to timer 24. '192 Patent Column 3, lines 22-33, 53-55.

Audio signal 10 also goes into background detect 40. Background detect 40 extracts from audio signal 10 a sample of the actual background noise from the communication and stores that sample in background memory 52. '192 Patent, Column 5, lines 33-40. Later, that sample of background memory is included with a control word [*7] placed into data register 14.

Data register 14 contains not only the digital representations of the analog signal but also certain control information. Code insert 26 inserts into data register 14 a preamble and the pause control codes. '192 Patent, Column 3, lines 34-36. The preamble is a special pattern that allows the circuitry to differentiate control words, such as the actual pause control codes, from the actual audio data. '192 Patent, Column 3, lines 14-16.

The stored data is eventually sent to the receiver. A storage means, such as a computer or other storage device, stores the data before it is sent to the receiver. '192 Patent, Column 2, lines 50-54, column 5, lines 64-66. ⁴

⁴ While the '192 patent clearly may operate with a storage means, the necessity of a storage means is disputed by the parties.

II. Applicable Legal Standards

1. The Role of the Court

In an April 1995 *en banc* decision, the Federal Circuit dramatically changed the face of patent litigation [*8] by redefining the respective responsibilities of judge and jury in patent infringement actions. In *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir.) (en banc), cert. granted, 116 S. Ct. 40, 132 L. Ed. 2d 921 (1995), the court held that [HN1] claim construction is always a matter of law for the court, rather than a factual question for the jury. The court noted that "in a case tried to a jury, the court has the power and the obligation to construe as a matter of law the meaning of language used in the patent claim." *Id.* at 979.

Thus, resolving a patent infringement action requires two steps: (1) a court must first, as a matter of law, interpret all the claims in the patent that are in dispute, and (2) once the court interprets the claims, the finder of fact must then scrutinize the accused device in order to determine whether the accused device infringes the patent-in-suit. *Id.* at 976.

While the *Markman* decision holds that the court, rather than the jury, should interpret the claims, the opinion does not explicitly prescribe how this should be accomplished. ⁵ In the end, *Markman* appears to leave [HN2] a district court with three options: (1) interpret the claims on the paper [*9] record, if possible; (2) hold a separate bench trial to resolve the disputes surrounding claim interpretation before trial; or (3) wait until the actual trial and rule on the claim interpretation issues just prior to instructing the jury. See *Elf Atochem North America, Inc. v. Libbey-Owens-Ford Co., Inc.*, 894 F. Supp. 844, 850 (D. Del. 1995) (listing three possible procedural postures for interpreting claims).

⁵ *Markman* states only that claim construction "can be accomplished by the court in framing its charge to the jury, but may also be done in the context of dispositive motions such as those seeking judgment as a matter of law."

In this case, Northern Telecom has opted for the first possibility by moving for summary judgment as to the proper interpretation of Claims 1 and 8 in the '192 patent. Moll opposes the motion by arguing (1) that material factual issues exist that preclude the entry of summary judgment, and (2) that Northern Telecom's interpretation of the claims is incorrect. Both parties have [*10] submitted numerous exhibits from the patent prosecution, declarations of technical expert witnesses, deposition transcripts, and answers to various interrogatories and discovery requests. As specified in greater detail *infra*, this Court finds that some points are amenable for summary judgment and that others may be resolved only after a pre-trial *Markman* bench trial.

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2. Methodology of Claim Construction

[HN3] A court must follow several guidelines for proper claim construction. Claims are the numbered paragraphs appearing at the end of the patent specification which contain words used by the inventor to describe his or her invention. *In re Vamco Mach. and Tool, Inc.*, 752 F.2d 1564, 1577 n.5 (Fed. Cir. 1985). *A fortiori*, the claims of a patent define the scope of the invention and it is to these wordings that one must look to determine if there has been infringement. *Autogiro Co. of America v. United States*, 384 F.2d 391, 396-97, 181 Ct. Cl. 55 (Ct. Cl. 1967). Courts can neither broaden nor narrow the claims to give the patentee something different from what he or she had set forth. *Id.* However, while courts are confined by the language of the claims, they are not confined [*11] to the language of the claims in interpreting their meaning. *Id.* Rather, proper claim interpretation requires consideration of additional sources: the patent's specification, the drawings, and the patent's prosecution history in the Patent and Trademark Office ("PTO"). *Markman*, 52 F.3d at 979 (citations omitted).

[IIN4] The specification of a patent is a written description of the invention, sometimes supplemented by figures or drawings. 35 U.S.C. § 112 (first paragraph). While a specification may not be used to alter the explicit language of a claim, the specification may act as a dictionary in explaining the invention and interpreting the claims. *Autogiro*, 384 at 398. Moreover, while a patentee is "free to be his or her own lexicographer," *W.L. Gore and Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983), *app. after remand*, 842 F.2d 1275 (Fed. Cir. 1988), any special definition of a word used in a claim must be clearly defined in the specification. *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388 (Fed. Cir. 1992). Without a special definition, a word will be given its ordinary and accustomed meaning. [HN5] *Westek Assocs. v. Tri-Lite Electronics*, [*12] *Inc.*, 722 F. Supp. 474, 484 (N.D. Ill. 1989).

A court must also consider the patent's prosecution history, or "file wrapper," if it is in evidence. *Markman*, 52 F.3d at 980 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 33, 86 S. Ct. 684, 15 L. Ed. 2d 545 (1966)). However, although the prosecution history can and should be used to understand the language used in those claims, it, similar to the specification, cannot "enlarge, diminish, or vary" the limitations in the claims. *Id.* (citing *Goodyear Dental Vulcanite Co. v. Davis*, 102 U.S. 222, 227, 26 L. Ed. 149 (1880)).

Finally, [HN6] a court may, in its discretion, receive extrinsic evidence in order to assist the court in understanding scientific principles, the meaning of technical terms, and terms of art that appear in the patent and

prosecution history. *Id.* However, the decision to utilize extrinsic evidence rests solely with the trial judge. Furthermore, the extrinsic evidence is to be used only for the purpose of assisting the court in understanding the patent, and not for the purpose of varying or contradicting the terms of the claim. 52 F.3d at 981. An opinion of an expert witness is an example of the extrinsic evidence a court may rely upon [*13] in interpreting claims. In *Markman*, the Federal Circuit elaborated on the role of expert testimony in claim construction:

[[HN7] As to expert legal opinions], the court has complete discretion to adopt the expert legal opinion as its own, to find guidance from it, or to ignore it entirely, or even to exclude it. When legal "experts" offer their conflicting views of how the patent should be construed, or where the legal expert's view of how the patent should be construed conflicts with the patent document itself, such conflict does not create a question of fact nor can the expert opinion bind the court or relieve the court of its obligation to construe the claims according to the tenor of the patent.

Markman, 52 F.3d at 983 (citations omitted) (emphasis added). Moreover, ruling that an inventor's testimony is entitled to "no deference," the court noted that the court's "complete discretion" applies even when the "legal expert" is the inventor himself or herself. *Id.*

III. The Claims of the '192 Patent

The '192 patent contains 16 claims. Claim 1 pertains to Moll's pause suppression system and establishes a correspondence between the code insert [*14] circuit ("encoding means") and several characteristics of the pause. ' Claims 2 - 9 are dependent on Claim 1. ' Def. Ex. A, Columns 11-12. Claims 8 and 9 contain additional limitations pertaining to the storage and transmission of background noise generated during pauses. Claims 10 - 16, which are not at issue in the present motion, relate to a "repetition suppression" system.

6 The patent refers to the pause as "the absence of said analog signal." '192 patent, Column 11, lines 35-52.

7 A dependent claim is one which also includes all of the elements of the claim from which it depends. 35 U.S.C. § 112, paragraphs 3 and 4.

The parties agree on the interpretation of all claims except Claims 1 and 8. Claim 1 reads as follows:

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A system for minimizing the storage or transmission of digital representation of analog signals comprising means for converting an analog signal into digital representation, data register means for storing said digital representation at locations therein dependent upon the [*15] time related receipt of said analog signals, first means for detecting the complete absence of said analog signal, second means for detecting the duration of said absence of said analog signal, encoding means for receiving signals from said first and second means for detecting for encoding digital data relating to the absence of said analog signal and for inserting into said data register means in a time related location therein coded information corresponding to a start, time length, and end of the absence of said analog signal at a predetermined time after the end of the absence of said analog signal, and means for transferring said encoded data from said data register means to a storage means.

Thus, Claim 1 may be summarized as follows. In general, Claim 1 describes a system for minimizing the storage and/or transmission requirements of digital representations of actual audio signals. * This system functions by using several elements which correspond to the structures in Figure 1 as specified parenthetically. * First, Claim 1 includes (1) a means for converting the analog signal into a digital representation (A/D Converter 12), and (2) a data register means (Data Register [*16] 14) for storing the digital representation at time-related storage locations. Second, Claim 1 also contains two "detecting means." The "first means for detecting" (VOX 22) detects pauses (referred to in the claim as "absence of said analog signal"). The "second means for detecting" (VOX 22 and Timer 24) detects "the duration of the [pause]." Third, Claim 1 contains an "encoding means" (Code Insert 26) which receives signals from the first and second detecting means and encodes the digital data corresponding to the start, end and duration of the pause. The encoding means then inserts this coded information into the data register at a predetermined time after the end of the pause. Finally, Claim 1 contains a means for transferring (Delay Line 18 and/or Data Register 14) the encoded data from the data register to the storage means.

8 The parties dispute whether the '192 patent applies to transmission systems.

9 Moll listed the corresponding structures in his response to Northern Telecom's Interrogatory No. 12.

[*17] Claim 8, which is dependent on Claim 1, claims the following:

The system of claim 1 further comprising means for detecting background noise included in said analog signal, means for storing a sampling of said background noise, encoding means for receiving signals from said means for storing and converting said background noise into background noise digital data coded information, and means for applying the background noise digital coded information relating to said background noise to said data register means at time related locations with respect to said analog signals.

Thus, in addition to the elements included in Claim 1, Claim 8 contains four elements, all pertaining to background noise. The first element is a means for detecting background noise from the actual audio signal (VOX 22 and Background Detect 40). The second element is a means for storing a sampling of the background noise (Background Memory 52). The third element, an encoding means (Code Insert 26), receives signals from the storage means and converts the background noise from the analog signal into "background noise digital data coded information." The fourth element is the means for applying the background [*18] noise digital coded information to the data register means (Code Insert 26).

IV. Discussion: Interpretation of Claims 1 and 8:

Northern Telecom requests that this Court enter summary judgment in the form of 6 specific and 2 more general findings interpreting Claims 1 and 8. A ruling in Northern Telecom's favor as to all 6 specific findings effectively would result in 2 general findings that the claims of the '192 patent (1) define systems that operate on analog, rather than digital, input signals, and (2) cover storage systems but not real-time transmission systems. This Court will grant Northern Telecom's first general requested interpretation and will adopt the 2 specific findings underlying it. On the other hand, because more information is needed than is provided in the parties' submissions in order to adopt Northern Telecom's second general requested interpretation, this Court will deny summary judgment on that point. This Court will, however, adopt 2 of Northern Telecom's 4 specific proposed findings underlying the second proposed general interpretation. The remaining 2 specific points will be re-

solved following a brief *Markman* bench trial prior to the jury [*19] trial.

A discussion of the 8 proposed findings follows.

1. Claims 1 and 8 are limited to analog, rather than digital, input signals.

Northern Telecom seeks a ruling that the system defined by Claims 1 and 8 operates only on analog input signals. The claims' language, the specification, and the prosecution history support such a result. Therefore, this Court will grant Northern Telecom's request.

a. The First and Second Detecting Means in Claim 1 Operate Only on Analog Signals.

Claim 1 contains the following language with regard to the first and second means for detecting:

A system for minimizing the storage or transmission requirements of digital representation of analog signals comprising means for converting an analog signal to digital representation . . . first means for detecting the absence of said analog signal, second means for detecting the duration of said absence of said analog signal . . .

This Court agrees with Northern Telecom that the first and second means for detecting operate on analog signals. First, the language of Claim 1 supports this interpretation. Claim 1 refers to "said analog signal," a reference to the first usage of [*20] the term "analog signal" in the claims. The first time the phrase "analog signal" is used is in the phrase "means for converting an analog signal to digital representation." In the remainder of Claim 1, any time Moll wishes to refer to the digital representation of the analog signal, he refers to "said digital representation." Therefore, when he refers to "said analog signal," he obviously is not referring to the digital representation, or else he simply would have used the term "said digital representation." The term "said analog signal" can only logically refer to an actual analog signal.

Second, Figure 1 of the specification illustrates a structure, VOX 22, that corresponds to the two detecting means as operating only on analog signal 10. There is no reference to a digital signal.

Second, the prosecution history is clear that, in order to overcome a rejection, Moll amended his patent application to "define the detecting means as related to the analog signal." Remarks to Amendment in Response to PTO Action dated February 6, 1980, Def. Ex. H at 8. In contrast, in the same paragraph of the Amendment, Moll

noted that the repetition function of the '192 patent "is [*21] produced on the digital equivalent of the analog signal." Therefore, the prosecution history shows that Moll specifically amended Claim 1 in order to clarify that both detecting means operate on analog signals rather than digital signals.

b. In Claim 8, the Detecting Means and the Storage Means Use an Actual Sample of the Analog Audio Signal.

Finally, Northern Telecom requests an interpretation that, in Claim 8, the detecting means and the storage means use an actual sample of the analog audio signal. In his opposition, it appears that Moll misunderstands Northern Telecom's request as a request for an interpretation that Claim 8 relies on analog signals *only*. Moll's argument is thus misdirected.

This Court will grant Northern Telecom's requested interpretation. Claim 8 contains "a means for detecting background noise included in said analog signal" and "a means for storing a sampling of said background noise." The "background noise included in said analog signal" can be nothing other than background noise taken directly from the audio analog signal. Webster's New World Dictionary defines a "sampling" of something as "the act or process of taking a small part or quantity [*22] of something as a sample for testing or analysis" or "the sample so taken." Thus, it is obvious that the necessary "sampling of said background noise" is a small part or quantity of the background noise included in "said analog signal." Therefore, this Court agrees with Northern Telecom that Claim 8 requires that the actual background noise be both detected and stored.

2. A more developed record is required in order to determine whether the '192 patent covers only storage systems, and not real-time transmission systems.

Northern Telecom argues that the claims of the '192 patent cover storage systems only, as opposed to real-time transmission systems. Northern Telecom sets forth two general arguments in this regard: (1) Claim 1 contains three elements that are either unnecessary to or incompatible with a real-time transmission system, and (2) the specification describes only a storage system that cannot be used in a real-time transmission system.

a. Northern Telecom's argument that 3 of Claim 1's elements are incompatible with or unnecessary to real-time transmission system is not appropriate for summary judgment on the paper record before this Court. However, this [*23] Court will construe 2 of those 3 allegedly incompatible elements.

Northern Telecom argues that the '192 patent contains three elements that are incompatible with or unnecessary to real-time transmission systems: (1) the second

means for detecting the duration of the pause in Claim 1, (2) the encoding means in Claim 1, and (3) a separate storage means. Northern Telecom has also moved for this Court's specific interpretations of these 3 elements. While the parties' submissions are sufficient to enable this Court to interpret the first 2 of these 3 elements, this Court does not agree, based on the present record, that the interpretations of these 2 elements automatically mandate a finding that the '192 patent does not cover real-time transmission systems.

1) The Second Means for Detecting the Duration of the Pause Determines the Actual Time Duration of the Pause. The Encoding Means Then Inserts This Code Into the Data Register.

First, Northern Telecom moves for a proposed interpretation that the "second means for detecting the duration of a pause" (which corresponds to VOX 22 and Timer 24) actually determines the length of the pause. In contrast, Moll contends that Claims [*24] 1 and 8 do not require that the *length* of the pause be measured. Moll argues instead that a "means for detecting the duration of a pause" differs from a "means for determining the duration of a pause."

This Court cannot accept Moll's argument. Because the patent does not offer any special definitions of the words "duration" or "detect," this Court is entitled to rely on their commonly accepted meanings. *Intellicall*, 952 F.2d at 1388. *Accord Jonsson v. Stanley Works*, 903 F.2d 812, 820 (Fed. Cir. 1990). Webster's New 20th Century Dictionary of the English Language defines "detect" as "to discover or find out" or "to discover the presence or existence of anything hidden or not clear." Webster's Third New International Dictionary defines "duration" as "the quality or state of lasting for a period of time: continuation in time or existence" or "a portion of time during which something is measurable or during which something exists, lasts, or is in progress." It would ignore common sense and ordinary usage of the words to hold that "detecting the duration" of a pause differs from determining the length of the pause. Once the second means detects the length [*25] of the pause, the encoding means receives this signal from the second means and inserts into the data register means the coded information. '192 Patent, Claim 1.

Because the language of the claim supports Northern Telecom's position, this Court will grant summary judgment for Northern Telecom on this point.

2) The encoding means in Claim 1 requires inserting a start of pause code into the data register means after the end of the pause.

Northern Telecom also argues that the '192 patent requires the start of pause code to be inserted into the

data register after the end of the pause. This Court agrees, as Northern Telecom's argument is supported by the language of the claim and Moll's own deposition testimony.

The relevant portion of Claim 1 states as follows:

a system comprising an "encoding means for receiving signals . . . and for inserting into said data register means in a time related location therein **coded information corresponding to a start, time length, and end of the [pause] at a predetermined time after the end of the [pause].**"

(emphasis added). Moll argues that the words "at a predetermined time after the end of the [pause]" [*26] refer only to the coded information corresponding to the *end* of the pause, and not to the coded information corresponding to the *start* and time length of the pause.

This Court rejects Moll's construction. First, relying on basic rules of grammar, the object of the clause "for inserting" is "coded information." The "coded information" consists of all three signals. The words "at a predetermined time after the end of the pause" describe when the coded information - *all* of the coded information, including the start code - is inserted.

Moreover, in his deposition, Moll *admitted* that the start code is inserted at the end of the pause. [HN8] A court may utilize an inventor's deposition testimony in determining the meaning of patent claims. *Jonsson*, 903 F.2d at 820-21. Moll's deposition transcript reads as follows:

Q. And it says that the coded information is inserted "at a predetermined time after the end of the absence of said analog signal," correct?

A. Okay.

Q. And the coded information described in that is the start, the time length and the end of the pause, would you agree with that?

A. I would interpret that as reinforcing what I was [*27] saying.

Q. So it says the coded information corresponding to the start of the pause is inserted into the register after the end of the pause. Right?

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A. Yes.

Q. You agree with that?

A. Yes.

Moll dep. at p. 737-38 (emphasis added).

Hence, the only reasonable interpretation is that the start code is inserted into the register after the end of the pause. Therefore, this Court will grant summary judgment for Northern Telecom on this point.

3) It is not clear from this record whether Claim 1 requires a storage means separate from the elements in Claim 1 and from a receiver.

Northern Telecom seeks a ruling that the '192 patent requires a storage means (i.e., computer or other storage device) that lies outside of the data register means and outside of any receiver connected to such storage means via a transmission line. This Court will not issue such a ruling on a motion for summary judgment.

The last paragraph of the specification states as follows:

While storage space has been emphasized throughout the application, the invention also applies to transmission lines (i.e., telephone, television, data, etc.) where information is transmitted [*28] directly to a receiver without using a separate storage means.

'192 Patent, Column 11, lines 29-33. Northern Telecom contends that lines 29-33 mean that the storage means must lie *between* the transmitter and receiver and therefore could not be part of the receiver. In response, Moll argues that one skilled in the art would understand lines 29-33 to mean that when the '192 patent is used in a real-time transmission system, the storage means between the interface of the transmitter and receiver is eliminated, and the information in the data register of the transmitter is transmitted directly to the data register of the receiver.

Each party has submitted an expert declaration supporting its position. Because this Court cannot resolve this issue based solely on the competing expert declarations, Northern Telecom's motion will be denied at this time as to this point. The parties may offer evidence on this point at the *Markman* bench trial.

b. This Court cannot hold, based on the present record, that the specification of the '192 patent only supports claims that cover storage systems.

Northern Telecom further contends that the patent's specification neither describes [*29] nor enables a real-time transmission system. In response, Moll argues that the language of the claims does not support Northern Telecom's argument and that the specification may not limit the claims.

The last paragraph of the patent's specification states the following:

While storage space has been emphasized throughout the application, the invention also applies to transmission lines (i.e., telephone, television, data, etc.) where information is transmitted directly to a receiver without using a separate storage means.

'192 Patent, Column 11, lines 29-33. Although Northern Telecom's argument in this regard is less than clear, Northern Telecom appears to argue that this paragraph is insufficient, first, because the paragraph refers only to "transmission" and not to "real-time transmission," and, second, because the remainder of the specification does not suggest that the storage system can be eliminated.

Based on the submissions of the parties presently before this Court, this Court cannot grant summary judgment for Northern Telecom on this point. It may well be that, following expert testimony and a dissection of the specification at a *Markman* bench trial, Northern [*30] Telecom's argument will prove meritorious. At this point, however, this Court lacks sufficient information to enable it to reach Northern Telecom's conclusion.

IV. Conclusion

This Court will grant Northern Telecom's motion as to 6 of its 8 requests. As a matter of law, the claims of the '192 patent are interpreted as follows:

1. The second detecting means of Claim 1 determines the actual time duration of pauses.
2. The encoding means of Claim 1 inserts into the register means a code that represents a time duration of pauses.
3. The encoding means inserts a start of pause code into the register means after the pause ends.
4. Claims 1 and 8 require the use of analog input signals.

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5. The first and second detecting means in Claim 1 operate on analog signals.

6. The detecting and storing means in Claim 8 detect and store, respectively, a sampling of the actual audio background noise.

This Court will deny Northern Telecom's summary judgment motion as to the two remaining requests since a more developed record is required to answer the following questions:

1. Do claims 1 and 8 cover storage systems only and not real-time transmission [*31] systems?

2. Does the storage system lie outside the system having the elements of Claim 1 and outside of any receiver connected to such storage means via a transmission line?

The parties may offer all supporting evidence, limited to these 2 points, at a *Markman* bench trial to be held on Monday, December 18, 1995 at 9:00 A.M. in Courtroom 13A, United States Courthouse, 601 Market Street, Philadelphia, PA 19106.

An appropriate Order follows.

Clarence C. Newcomer, J.

ORDER

AND NOW, this 8th day of December, 1995, upon consideration of defendant Northern Telecom's Motion for Partial Summary Judgment of Claim Interpretation, plaintiff Moll's Opposition thereto, and consistent with the foregoing Memorandum, it is hereby ORDERED that said Motion is GRANTED in part and DENIED in part as follows.

Northern Telecom's Motion is GRANTED as to 6 of its 8 requests. As a matter of law, the claims of the '192 patent are interpreted as follows:

1. The second detecting means of Claim 1 determines the actual time duration of pauses.

2. The encoding means of Claim 1 inserts into the register means a code that represents a time duration of pauses.

3. The encoding [*32] means inserts a start of pause code into the register means after the pause ends.

4. Claims 1 and 8 require the use of analog input signals.

5. The first and second detecting means in Claim 1 operate on analog signals.

6. The detecting and storing means in Claim 8 detect and store, respectively, a sampling of the actual audio background noise.

Northern Telecom's Motion is DENIED at this time as to the following requests:

1. Claims 1 and 8 cover storage systems only and not real-time transmission systems.

2. The storage system lies outside the system having the elements of Claim 1 and outside of any receiver connected to such storage means via a transmission line.

The parties may offer all evidence on these 2 points at a *Markman* bench trial to be held on Monday, December 18, 1995 at 9:00 A.M. in Courtroom 13A, United States Courthouse, 601 Market Street, Philadelphia, PA 19106.

AND IT IS SO ORDERED.

Clarence C. Newcomer, J.